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BISHOP'S RING SEEN IN AUSTRALIA FOLLOWING THE EXPLOSION OF QUIZAPÚ, CHILE, APRIL 10, 1932

Mr. Albert G. Ingalls, associate editor of the Scientific American, kindly sent to me the following letter by Mr. Frazer-Paterson, of Broken Hill, Australia:

I beg to advise that the Bishop's ring was visible in the western sky at 5 p. m. on Saturday the 23d July, 1932. This date is about 10½ weeks after the eruption in the Andes. The color of the ring was sepia.

Bishop's ring, so named after the Rev. Sereno Bishop, of Honolulu, Hawaii, who was the first to describe it as seen after the explosion of Krakatoa in 1883, is a broad, diffuse corona of about 22° outer radius. It is produced by diffraction of the sun's light by fine volcanic dust in

the stratosphere and is analogous to the small rings in thin clouds about the sun and moon.

This appearance in Australia of Bishop's ring is only one of several phenomena of the same origin reported from many parts of the Southern Hemisphere since the explosion of Quizapú, latitude 35° 38′ S., the evening of April 10, 1932. Of course the intensity of the sunshine at the surface of the earth has been reduced over much of that hemisphere, and it will be interesting to know the consequent effect on the average temperature. There is no evidence yet that this dust has spread to the Northern Hemisphere.—Editor.

WEATHER CHARTS OF THE NORTHERN HEMISPHERE

It is a matter of great interest to meteorologists and climatologists that the Deutsche Seewarte of Hamburg has undertaken to produce, on behalf of the International Meteorological Organization, daily synoptic weather charts based on as full information as can be obtained. These charts are not prepared in time for current forecasts, but are for that detailed study out of which more

may be learned of the causes of spells of abnormal weather, and thus greater accuracy, and especially greater range, in weather forecasting be secured.

The Deutsche Seewarte, which needs and merits support in this undertaking, will gladly furnish further information and a sample map to anyone especially interested in this work.—Editor.

TROPICAL DISTURBANCE OF OCTOBER 7 TO 15, 1932

By R. H. WEIGHTMAN

[Weather Bureau, Washington, D. C.]

A disturbed condition made its appearance over the western Caribbean on the 7th between Swan Island and Cape Gracias and during the next two days moved slightly north of west, with slowly decreasing pressure at the center. It was central on the evening of the 9th a short distance east of Belize, with lowest pressure 29.56 inches. It continued to move slowly westward until the 11th, when it was central near Carmen (Mexico). (See Track No. 10 on Chart VIII at end of this Review.) It then turned more to the northwestward, and on the 14th, 8 a. m., it was located about 200 miles southeast of Brownsville. Storm warnings were hoisted between Brownsville and Corpus Christi following the receipt of 4 p. m. special observations from these stations. Brownsville reported winds shifting from the north to northeast

and a fall in barometric pressure of 0.14 inch in three hours. By 8 p. m. of the 14th, however, the winds at Brownsville had backed to northwest, which with other available information placed the center about 150 miles east by south of Brownsville. During the next 12 hours the disturbance advanced northeastward and on the morning of the 15th was located about 120 miles southeast of Galveston. At that time storm warnings were ordered between Galveston and New Orleans and a little later between New Orleans and Apalachicola. The disturbance moved inland across the Louisiana coast during the afternoon of the 15th. While attended by gales no winds of hurriance force were reported at any time during its history.